## **CLAIMS**

1. A fluorinated polymer comprising an unit represented by the following formula (1).

$$\begin{array}{c|c}
CF_2 & C \\
O & O \\
H & C & C \\
H & H \\
Formula (1)
\end{array}$$

- 2. The fluorinated polymer according to the claim 1, wherein the fluorinated polymer is a homopolymer.
- 3. The fluorinated polymer according to claim 1, wherein the fluorinated polymer is represented by the following formula (2),

wherein: in Formula (2), Y<sup>1</sup> to Y<sup>4</sup> each independently represent a hydrogen atom, fluorine atom, or chlorine atom.

4. A method for producing fluorinated compounds, in which a

compound represented by the following formula (4) is produced by reaction of 2-chloro-2,2-difluoroethane-1,1-diol and at least one compound represented by the following formula (3):

wherein: in Formula (3), X represents a hydroxy group, a chlorine atom, or bromine atom.

5. A method for producing fluorinated compounds, in which a compound represented by the following formula (4) is produced by reaction of 2-chloro-2,2-difluoroacetaldhyde and ethyleneoxide.

6. A method for producing fluorinated polymers, in which a polymer represented by the following formula (1) is produced by polymerization the fluorinated compound represented by the following formula (4) obtained by the method according to claim 4.

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7. A method for producing fluorinated polymers, in which a polymer represented by the following formula (1) is produced by polymerization the fluorinated compound represented by the following formula (4) obtained by the method according to claim 5.

8. An optical/electrical material or coating material comprising the fluorinated polymer according to claim 1.